## A mine of disinformation



Andrew Newton

## What you see is not always what you get...

Our lives our influenced a thousand times a day without us having the slightest idea it's happening.

In the late 1970's, hypnotist Robert Halpern, famed for his interminably long performances, began his spectacular stage show at the Glasgow Pavilion by telling his audience 'you all respond to thousands of suggestions every single day of your lives without realising it.' He was, of course, right and would spend the next seven hours proving it. Halpern was a great eccentric - a role he played both on and off stage. Habitually late for performances, his shows seldom finished before midnight - one-o-clock in the morning was not unusual. He was harder to get off the stage than Ken Dodd!

Nonetheless, four decades later, his words still echo down the years and rattle around in my head as I become increasingly aware of how simple, subtle suggestion has tweaked my own perceptions of reality. I am also more aware and occasionally irked, when I see the irresistible effect of suggestion and the way it influences others as life plods on as the larger organism of humanity, with its almost infinite sub-groups, gets carried along on a tide of disinformation and manipulation so blatant, most people are unaware it's even happening.

This is especially true of teenagers, who all seem to want the same things, informed now more than ever by the relentless onslaught of social media and the Internet. Nothing excites human curiosity more than the 'ping' of a text message or a Facebook alert. This curiosity is also something that assists the manipulators, as we will see.

On Saturday 4th April 2009, during a long and otherwise uneventful flight home to Cape Town, I picked up a copy of the New York Times. [A lot of my background reading is done at 35,000 feet because I can't sleep on aeroplanes.] My eyes were drawn to a piece penned by one Nicholas D. Kristof, a self-styled expert on something or other, and his article was entitled Beware of Experts and it immediately caught my attention. That, and because it also had a nice picture of some sheep.

The gist of Mr. Kristof's argument was that the experts talk as much humbug as nonexperts and he went on to prove this was indeed the case by citing some rather exciting research, which I am going to briefly regurgitate here.

The first example has become known as 'The Dr. Fox Effect.' Dr. Myron L. Fox in reality does not exist because Dr. Myron L. Fox was an actor, employed on this occasion to give a vacuous speech on $f^{* *} k$ all to an audience of professional educators. Billed as an expert on the application of mathematics to human behaviour, Dr. Fox's speech was full of meaningless facts and figures interspersed with some good jokes - as is the tradition on these occasions - but otherwise completely and utterly devoid of any substance whatsoever.

After the speech, the attendees were asked to comment via the usual anonymous feedback forms. Most were very impressed - only one protested that it was 'too intellectual a presentation.' This just goes to show that when presented with an expert, even the sharpest minds become numb with adulation.

Dr. Fox used the tried and tested techniques of the seasoned orator. Any accoutrement of knowledge - dress, books, an academic setting, lend to one's proclamations an extra degree of profundity. Any article or treatise that is accompanied by diagrams, charts, or
even better, photographic images lending gravitas to the argument, are more readily accepted by the brain because they give any theory or argument credibility.

A separate study, carried out by Professor Philip Tetlock at the University of California, Berkeley, monitored 82,000 predictions by 284 experts over a period of 20 years. He found that the expert's predictions were only a tiny bit more accurate than random guesses. Professor Tetlock quotes that level of accuracy as being no better that a chimpanzee throwing darts at a board. The worrying thing is that he also found that these same experts were able, on average, to move public opinion by three percentage points - far more than the less than $0.2 \%$ accuracy of their predictions.

Even more disturbing is that this overall trend was not affected in the slightest by factors such as how many years experience the experts had in their chosen fields, how many letters they had after their names, or whether their expertise lay in politics or economics or pottery. The important factor was that they were on the telly, and that was enough. The experts who shouted and waved their arms about a lot got booked more often than those who didn't shout or wave their arms about a lot, as did the experts with an 'image' such as those who wore unusual clothes. Professor Tetlock's book Expert Political Judgement (2005) is well worth a read.

Another book, Predicatbly Irrational - the Hidden Forces that Shape Our Decisions by MIT Professor Dan Ariely, will also serve as a revelation for the uninitiated. I'm not going to spoil it for you by quoting any of Dr. Ariely's research, but it is, in my humble opinion, one of the best books on how human behaviour is influenced ever written.

All the above was the catalyst that started me out on my own search for examples of readily available nonsense swallowed whole by an unsuspecting public. Once I started making the list, I was staggered by the sheer volume of it shovelled our way on a daily basis. I was even more shocked by the level of belief people attached to it.

So here is the pick of the crop, in no particular order...

## Ouch! that doesn't hurt!

Researchers from the Centre for Complimentary Medicine Research at the Technical University of Munich led by Dr. Klaus Linde have confirmed what we all knew deep down to be the truth anyway... fake acupuncture treatment works just as well as the real thing! Once you've read this, it should be obvious that it is the placebo effect at the root of one of the most popular treatments for a range of problems from migraine to blood pressure to getting pregnant to you name it, we got it.

An analysis of over 7,000 patients proved acupuncture to be more effective in treating migraines than tablets, which goes some way to proving my point. What is not clear is whether the patients involved in the study were particularly suggestible, but then a study of such magnitude is bound to include a good cross-section of high and low suggestibility. Nor is there any indication as to whether the acupuncturists were properly trained or a bunch of amateurs having a laugh - that would have been a lot more revealing and a lot more fun.

The bottom line is that it did not matter one jot whether the needles were inserted in the correct places, along so called 'meridians' or 'energy points' or at random. The research
also shows that acupuncture does nothing to improve fertility, which should come as no surprise.

## No Brainer

Brain training is the new big thing for anyone ready to move on from Anthony Robbins books. Jostling for position in the already highly competitive marketplace, these new machines, resembling hand-held Nintendo games and fronted by Star Trek Captain Patrick Stewart (no doubt for a hefty fee) have sold over 100 million galaxy-wide. Sadly, brain training is just a gimmick with very little real value. It doesn't train your brain any more than any other stimulating mental activity like Scrabble or Soduku.

Again, we turn to the serious scientists for the proof. Professor Alain Lieury put the testers to the test at the University of Rennes by giving the consoles to a group of ten-year-old children. He found that normal run-of-the-mill activities such as doing their homework, watching documentaries, reading and playing games, were not only just as effective but were more fun into the bargain!

Professor Lieury's principal irk was the claim that brain trainers improved memory - a dubious claim not actually backed up by any recognisable scientific research. In Professor Lieury's tests, those who were not exposed to the brain trainer, relying instead on more traditional paper and pencil exercises, fared much better after a six-week trial. Their memories improved by a remarkable $33 \%$ whereas the group whose brains had been 'trained' by the machines showed a significant decrease in performance of $17 \%$.

It just proves the old rule - if you want to remember something, write it down! That's why generations of schoolchildren and students make notes in class - or is that too obvious? When it came to more complex mathematical exercises, both groups fared reasonably well - both the scribblers and the brain-trained improved by 19\%. Those with no extra training whatsoever, also improved by 18\%!

According to a statement released by the Stanford University Center on Longevity and the Berlin Max Planck Institute for Human Development, and supported by 70 of the world's leading cognitive psychologists and neuroscientists, there is no solid scientific evidence to support the claims of brain training programmes. Their conclusions are also backed-up by 23 other studies.

The American Federal Trade Commission has fined one brain training company, Luminosity, $\$ 2$ million for making false claims about the benefits of their games. Luminosity claimed their game 'maximised your abilities and staved off the effects of dementia and memory loss.' In future the company is forbidden to make any claims that are not substantiated by reliable scientific evidence.

There is a difference between Fluid Intelligence, which is hard to change or improve, and Crystallised Intelligence, that is, a person's knowledge and skills, which is not. For example, simply learning new things such as how to play the piano or cook a new dish, can increase your crystallised intelligence, but not your fluid intelligence.

Makes you think doesn't it? Or was that the point of the exercise anyway? Either way, there's far too much charlatanism being peddled these days and this is just another example. Shame on you Captain, Mr. Spock could have told you the whole thing was illogical.

## Vote For Me!

The choice is yours... you can vote for Person A: intelligent, skilful, industrious, warm, determined, practical, cautious... or you can vote for Person B: intelligent, skilful, industrious, cold, determined, practical, cautious.

I bet you voted for Person A.
Nixon's failure to win the Presidency after the 1963 televised debate is a prime example of what I'm talking about. Radio listeners thought Nixon had won because his arguments were more coherent - those watching the debate on TV knew that Kennedy had won. Why? Because Nixon, who did not understand the enormous reach and power of television, had forgotten to shave, which lost him the election. It was a better-looking John F. Kennedy who moved into the White House.

There is a postscript to this. Although nothing directly to do with the Nixon/Kennedy debate, it is a trick utilised by politicians all over the world, all the time. Getting people to think about whom, or what, they oppose, is more powerful than getting them to think about whom or what they support!

It's also much, much easier to convince someone that they were right all the time that convince them that they were wrong all the time. Anyway, I doubt it will make any difference to the way we make our choices. Theodore Roosevelt once said 'The most successful politician is he who says what the people are thinking most often in the loudest voice.'

A deftly handled juxtaposition of opposites always works well. President Kennedy was a charismatic statesman, and proved it when he spoke. 'Ask not what your country can do for you, ask what you can do for your country.' This symmetry of this famous line is very appealing. It's a kind of poetry that excites the pleasure centres deep within the brain. Cue Applause!

A coherent narrative - in other words, the order in which information is presented - is vital to determining how people think. Simplicity in political oratory always works best and court cases are won not on the presentation of facts, but on impressions. It's not really about presenting the evidence, it's mainly about how the evidence is presented! I had a Catholic education and I can vouch for the fact that even the most vacuous drivel sounds impressive when it's in Latin!

## Meaningless buzzwords of today

These will include words and phrases such as Opportunity, Community, Responsibility, Accountability - If I hear any of them one more time I am going to have to punch someone!

Did the car bump into the other car, or did it smash into it? Only one of those phrases gives the correct impression or meaning and the other is a lie!

Do oil companies engage in drilling or exploration? For that matter, is it Global Warming or Climate Change?

Rats are exterminated because they're vermin. Seals and elephants on the other hand are culled. That's because seals and elephants are nicer than rats.

When estate agents advertise a home as a renovator's dream that usually means it's a shithole and should be condemned as not fit for human habitation.

Some food products are advertised as pan-fried or oven roasted. This makes them sound healthier or more delicious, but it's all just playing with words. I mean... how else are you going to fry something - on a washing line? How else would you roast something if not in an oven? Perhaps Tescos have invented a way of cooking the Sunday roast by putting it in the washing machine.

Free range eggs just means that the chickens have daytime access to an outdoor run. The rules don't stipulate for how long. Are we currently experiencing a credit crunch - or the worst economic crisis since the 1920's?

Second-hand goods are no longer second-hand or even used, but are now pre-owned, or, wait for this... pre-loved!

Research suggests... Don't get too excited - the research only suggests... It is a wholly meaningless phrase, as is the expression 'World beating...' What? We were at war with another planet and I missed it?

Probably... A perfectly legal term that can be used to tell any number of lies about your product.

Up to... Another meaningless piece of trite foolery designed to con you into thinking you are getting something for nothing. You're not.

With the greatest respect... I don't give a s**t if you think I'm being disrespectful.
No offence... I don't give a s**t if you think I'm being offensive.
Full confidence... means someone is about to be fired.
Beware the humble asterisk* It's there to warn you that something may not be the full truth.

* More to the point, it usually refers to the fact that what the large print giveth, the small print taketh away.

Design and colour may vary. In other words, what you see on the box isn't necessarily what's in the box...

FREE is one of the most powerful words in modern consumer society. Except nothing in the universe is FREE, not even lunches.

They're Delicious!!! - which of course depends on someone else's opinion. Delicious is just another buzzword like probably and favourite.

Serving Suggestion - the picture on the packet bears no resemblance to the contents. The picture is more often than not how the contents can be used together with other foodstuffs not included in the packet to make the contents look more appetising.

Scientifically Proven! or Scientifically tested... by whom, or on whom?

## Evidence-based. Really?

People never return goods after a Trial Period. There is too much guilt attached to claiming your money back on something you've already used.

Customers get a sense of commitment to the product if they are made to fill in lots of forms and paperwork before they are allowed to pay for it. This makes it more desirable. Insisting on at least two forms of ID also helps reinforce that commitment.

It's a Bargain! - Er... not necessarily.
Free delivery! Oh please... f**k off. That's like saying 'Buy on get one free...!' which is like saying 'buy the right shoe and we'll throw in the left shoe for nothing'.

## The Price Is Right!

Giving people a frame of reference helps manipulate the way they think. A perfect example is pricing. Is something a bargain at $£ 200, £ 500$, or $£ 527$ ? Most people think that at $£ 527$ they are getting more of a bargain. By the same token, a seller who puts their house on the market for a precise sum, say $£ 385,000$ rather than $£ 350,000$ is more likely to get near the asking price because of something we call 'perceived value'.

The 7-up experiment (appropriately named after the popular lemonade-style drink) shows that presentation contributes to taste. The background colour of the can influences the way we perceive the product. The colour green indicates lime flavour while yellow indicates a lemon flavour. The evidence of our eyes, linked to our memory and imagination is the factor that makes this colour coding work. If you don't believe me, try to imagine a lime juice drink in a purple can!

A big mistake of course is to tell the truth about your product. This never works. Ask Gerald Ratner, whose off the cuff joke that his chain of high street jewellery stores were able to supply goods at such low prices 'because it's crap' backfired rather badly. All their branches closed a week later.

Sellers using ebay have caught on to the fact that starting things off with a very low bid attracts more people to the auction and in turn makes the item seem more desirable.

Scarcity is also something that makes items more desirable, hence the preponderance of sales slogans like Only 2 left in stock! Hurry while stocks last! Order NOW to avoid disappointment!

## Perception

Before the government finally got its act together and banned fox hunting, there was considerable public debate about the issue, which became very emotional. Anti-hunt protesters resorted to marches, protests and even sabotage to get their point across. The pro-hunt lobby opted for a more subtle approach - billboard advertising. The poster featured two pictures, side by side, of a good-looking nurse. In one, she was dressed in the traditional red jacket of the fox murdering classes, in the other, she wore her nurse's uniform. The caption under the pictures read 'Now they hate her? Now they don't?' the message was clear and succinct, but not persuasive enough for the government to abandon the new legislation.

Canned laughter used to be very popular on American sit-coms. I always felt that it was either dubbed on by a desperate producer who had realised in the edit that his wonderful show wasn't that funny after all, or Americans were so stupid they had to be told when something was funny. I'm still not sure. Maybe it is because we are being persuaded that these programmes are funnier than they really are.

When I did my first TV show in the UK, the producer thought that because I was new to TV, it would be a good idea to have Carol Vorderman introduce the pilot show to give hypnosis credibility. Carol Vorderman was respected, scientific, and above all, believable. This
device worked so well it was copied by Paul McKenna on his pilot show six months later, along with the routines, the jokes and the rest of the act... verbatim. McKenna does not have an original thought in his head - his success is based entirely on the work of others, regurgitated in a series of lightweight books and television interviews.

## The Men From the Council

Contrary to popular belief, speed bumps don't save lives - they cost them. Ambulances can't get to patients, particularly those who have suffered heart attacks, as quickly as they could if the tin gods at the council hadn't had their way. If you live in an area where there are speed bumps, best move - your chances of surviving a heart attack have just been reduced by 10\%!

Only one crime is solved per 1,000 CCTV cameras, although in fairness, 3\% of crimes are solved as a result of looking at CCTV footage. (Data correct as at 2015).

In 2005 the Education and Skills Minister banned junk food in schools as a measure designed to stop fat kids getting er... fatter. Even so, the former chairman of the Food Standards Agency, Sir John Krebs admitted that 'junk foods' had not even been defined and that no cost/benefit analysis had been undertaken or presented.

It's a sad truth that civil servants and government ministers do not fully understand 'scientific evidence' and are as confused as the rest of us. In any case, most politicians can't tell the difference between scientific evidence and a random guess anyway. They also suffer from a propensity to make decisions based on knee-jerk reactions to that most dangerous of all things, public opinion. Here too, the tabloid press, the tabloid television and the tabloid internet are equally to blame.

## A Night at the Movies

I like this film - it's based on a true story. Hollywood would have us believe that every victory in World War II was won by the Americans.

Historically, it was the British and not our trans-Atlantic cousins who captured the Enigma machine from the German U-boat U-110, although for some totally unexplained reason, the Americans think it was U-571. In a further affront to reality, the film portrays the U-boat as being captured rather than sunk by a British flying boat. It was the capture of the German code machine that was eventually instrumental in turning the tide of the war. And it happened before the Yanks entered the war. OK, so we couldn't have beaten Hitler on our own without the help of America's economic and industrial might, and they did come to our rescue in both World Wars, albeit late on both occasions. Nor should we ignore the enormous sacrifices of the Russian people and the valiant fighting of the Red Army in defeating Hitler's Nazi Jew-burning hoards.

In Saving Private Ryan, the camera manages to miss every single British Soldier who was in Normandy at the time, despite the fact that there were over a million of us there. Next, they'll be claiming they won the War of Independence! [America was British at the time, so in reality, we beat ourselves.]

Speaking of Hitler, the famous Jew-hating Mel Gibson rewrote history almost completely in his history-based masturbatory film Braveheart. In real life 'Braveheart' William Wallace was not a commoner but the son of a Scottish Noble. He was not hanged by the English and didn't catch the eye of Princess Isabel - perhaps as well as she was only nine at the
time and living in France. But not as far off the mark as that other Gibson w**kfest The Patriot. In reality, the British did not burn any churches, and certainly no churches with women and children in them.

Gibson's character was based on a guy called Francis Marion who was in real life a racist here at least, the similarity between the two must be obvious - who raped his black slaves and went hunting and killing Native Americans for sport. The only thing patriotic in this movie is John William's fabulous score.

In Troy we see characters being cremated with coins placed over their eyes. How curious money, never mind coins, had not yet been invented. When the wardrobe department raided the theatrical costumiers, they came away with outfits from the wrong period. As if that wasn't enough, many of the principle characters died in completely the wrong places. Homer will be spinning in his grave.

Oh, and by the way, no Americans took part in The Great Escape from Stalag Luft III, and especially not on a motorbike.

Never mind, we were warned. It's only based on a true story.

## The Customer Is Never Right

How many times have we seen the words Up to $50 \%$ OFF!? What this usually means is that only a small number of items have been marked down by $50 \%$ - the majority of 'bargains' are more often reduced by as little as $1 \%$. Still, it's a great way of getting people into the store.

Once inside, they get to see all the other truly magnificent and wonderful things they could buy (but don't need) and respond accordingly by getting their credit cards out. Often, the '50\% OFF' price was what the clever twats intended to sell it at in the first place. Stores often buy in certain items to sell at what appears to be bargain basement prices just to get you in there. Tragically, it's a strategy that works every time.

Special Offers are not always that special. Even if the price is the same as it always was, or even more than it always was, the customer will still buy it rather than lose it. What a cunning, avaricious lot those retailers are! You'd also be mad to miss the Mammoth Sale! Actually, the mammoth was smaller than the elephant - about two thirds to three quarters the size, but 'Elephant Sale' doesn't sound as good.

Escalators that take you past all the goodies before you get to the next escalator encourage shoppers to take a diversion and browse... and then buy more things you don't need. The smell of freshly baked bread, or mulled wine at Christmas, is guaranteed to put everyone in the mood for spending more than they can afford.

The World's 'favourite' airline, British Airways, might not be the World's favourite after all. The word 'favourite' can't be legally quantified - the word is another legal conundrum that advertisers use to tell lies, so it's actually meaningless. In reality, the world's favourite airline is actually $\mathrm{s}^{\star \star}$ t. Every time I have flown with turned out to be an experience l'd rather forget.

Mirrors on the walls of stores actually slow shoppers down, thereby giving them more time to er... shop, and of course buy more stuff they don't need.

In most big department stores, there are no windows which allow you to see the world outside because the store designers work on the principle that even a momentary glimpse of reality may distract you from the task in hand - shopping, getting your credit cards out, and buying more stuff you don't need.

Displays are not laid out in straight lines because, if they were, the chances are you would walk straight through them, without seeing all the other magnificent and wonderful things. All the display items, counters, all those racks of goodies are cleverly placed so that you are forced to look at all the crap (sorry, magnificent and wonderful things) they are trying to sell you.

All the essential items, such as bread and butter, milk and alcohol, are placed as far away from the entrance as possible. This means you always have to go on a safari to get to them, passing all the magnificent and wonderful stuff you don't need, but might just want to buy if it's shoved in your face. [OK, maybe not alcohol, but that's a question of priority judgement]. Supermarkets regularly change layouts so you have to go on a half-mile trek to find what it is you're actually looking for, again enticing you to buy the magnificent and wonderful things you weren't actually looking for and didn't know you needed until you saw them.

Normal priced items are often piled in bins at the end of aisles so they look like they are on 'special'. They're not. It just looks that way, and after all, who can resist a bargain? At the same time, high profit items have pride of place - at eye level.

It gets even more involved as you approach the checkout counter! Supermarkets usually put their cafes at the entrance. The smell of all that lovely food is bound to make you buy even more stuff. And even if you can resist the temptation to stay-a-while, there are still lots of magnificent and wonderful last-minute things just by the checkout counter itself, just in case you need something to keep the kids quiet while you queue to hand over your cash... tempting, irresistible, yummy...

If the supermarkets can make people feel good, it means that shoppers are likely to not only spend more, but they will return next time they need to stock up on all the magnificent and wonderful things they don't really need.

What most people don't realise is that only the more favourable reports on a product are written up. This is especially true of pharmaceutical products. What the supermarket chains want is stupid people shopping. What they don't want is intelligent people making sensible choices so they often mix up weights and measures to confuse us. Most people find it difficult to do the mental arithmetic involved in working out the relationship between cost per kilo and how any kilos you get in a packet to understand potential savings.

## A Home Away From Home...

Thinking of buying a new house? Your beautiful new home will look even more beautiful when you see the beautifully professionally decorated Show Home. Remember... it's not just a house, it's a home... your home... a cosy place filed with love and happiness... the place where you will bring up your happy well-adjusted children and live happy ever after. Not only has every square inch been lovingly made even more beautiful by expert designers, lovingly employing all the tricks of the trade to prove just how beautiful your beautiful home can really be, like leaving the lights on even in daylight, or removing all the internal doors to give you a feeling of space. Then they put in lots of mirrors \& glass furniture for the same reason. They also use small furniture in rooms. And don't forget all
those top quality fixtures and fittings you won't get when you buy one! They also use professional landscape gardeners and turn up the heating just so you get that cosy warm feeling!

## Motoring News

Are you fed up of hearing about electric and hybrid cars? If your car is electric, where does the electricity come from? All it means is that the fossil fuel is burned at the power station rather than in the car. Then it's sent down the power lines so that everyone can recharge their electric cars at the same time, thus putting a massive strain on an already stretched national grid. Added to which, the batteries are toxic and difficult to dispose of.

Of course! The obvious answer is Biofuels! Except that most biofuels are produced in the Third world, thus ruining the effectiveness of third world agriculture and resulting in even more starvation and an increase in the number of people trying to survive on less than $\$ 2$ a day. This is especially true in Africa. Still, that means the First world can sell poor Africans their own surplus food, which they can't afford because they are all trying to survive on less than $\$ 2$ a day.

## The Recycle Race

Then, there's recycling. Burning rubbish is supposed to be better for the environment technological advances mean that the incineration of all our waste is cleaner, reduces dependence on fossil fuels and can also be used to generate electricity. The resultant carbon dioxide could be channelled through greenhouses, encouraging plants to grow more quickly, which in turn will produce more oxygen. It's also five times more efficient than bird-shredding windmills.

## Fake News

Sound effects are often added to news items or documentaries - babies crying, the famous 'thud' of a police baton hitting a protester during the miner's strike, fake bank statements flashed on screen during Martin Bashir's famous interview with Princess Diana... that sort of thing... All designed to manipulate they way you perceive reality. Just like all the nodding heads on TV interviews. This is an old trick, older even than most television presenters. It adds gravitas to the point the interviewee is trying to make and leaves the viewer with the impression that the interviewer is actually listening to what is being said, when there not - they are actually thinking about getting their face on the Six-o-clock News, or better still, on Newsnight.

## 2009 - A Record Year Since Records Began...

In 2009 Britain experienced the hottest June since records began. Records began in 2003.
June 2009 was the wettest month in Chicago since records began. Records began in Chicago in 1959.

Also in 2009, the government revealed that children in Scotland had the healthiest teeth since records began... in 2003.

In the same year, 2009, spending on computer hardware fell to its lowest level since records began... in 2003.

Again in 2009, it was reported that air pollution in Hong Kong was at the worst levels since records began... in 2000.

In 2009, Britain's beaches had more litter on them than ever before, according to the Marine Conservation Society, whose records began in 2004.

We live in an age where more than at any other time in human history, we are bombarded with new ideas almost on a daily basis. It seems there is no limit to humanity's appetite for fad diets [no pun intended]. A lot of the information we are fed is scientifically untestable!

First they tell you eating potatoes is bad for you because of all the starch, then they tell you eating potatoes is good for you because you need the starch. Before long they'll be telling us smoking is good for our lungs! Who really knows anymore?

Doubtless all the advice doled out to us by government agencies has been properly and scientifically researched, which is how they got round to telling us that ideally, men should not consume more than 21 units of alcohol per week. Sounds sensible enough, and we all swallowed it. [Oops! another pun]. Except that the so-called 'expert' who came up with the figure admitted it was just a number he pulled out of the air - he admitted he had no idea what constituted a safe limit - the government wanted a number and that was the one he gave them, quite possibly after a few drinks.

Don't forget your five a day! The idea that you should consume at least five fruit and veg a day was originally put out by Sainsbury's, a major UK supermarket chain, as part of an advertising campaign designed to encourage people to buy more er... fruit and veg. And it worked, possibly because the campaign was assisted by images of healthy young children chomping their way through a selection of delicious carrots and mangos, and also because other supermarkets quickly jumped on the 'five a day' bandwagon.

The truth is, there's no real way of finding out because if the theory is correct because there's no way of scientifically testing it... unless of course you were able to carry out a mass experiment on hundreds of pairs of twins. The experiment would work like this - one twin would be force-fed their five a day while the other would be deprived of God's earthly bounty and would be fed only junk food, except maybe at Christmas and birthdays. This experiment would have to continue for their whole lives before an inarguable conclusion was reached. Dr. Joseph Mengele would be thrilled! But try getting it past the ethics committee!

Being able to test and confirm a hypothesis is vital to finding out the truth. We already know that at least $70 \%$ of the population are susceptible to the placebo effect, even when they are told the placebo is a placebo. The placebo is the secret of why therapies such as Reiki and Homeopathy - one of the more nonsensical snake oil products of the modern era - work so well.

So in conclusion: Think before you buy, and don't be fooled by the hype! Above all, don't believe a word you're told, because it's more than likely to be a mine of disinformation!

## Copyright Andrew Newton 2015. All Rights Reserved.

